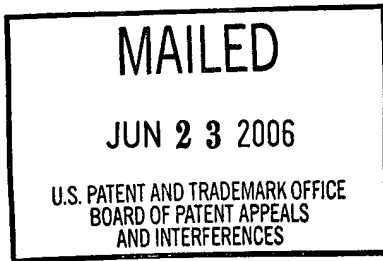


The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES



**Ex parte** GEORGE T. CHANEY

Appeal No. 2006-1280  
Application No. 10/645,025

ON BRIEF

Before OWENS, NAPPI and FETTING, **Administrative Patent Judges.**

NAPPI, **Administrative Patent Judge.**

**DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. § 134 of the final rejection of claims 25 through 27 and 29. For the reasons stated *infra* we will not sustain the examiner's rejection of claims 25 through 27 and 29.

**THE INVENTION**

The invention relates to an electric vehicle and method of replacing the battery. The vehicle has a chassis, the front and rear portion are formed with the vehicle body, a section spanning the front and rear portion of the chassis

define the sides of a removable battery module. See pages 3, 4, figures 4, 6 and 7 of appellant's specification.

Claim 27 is representative of the invention and is reproduced below:

27. A method of replacing a battery module of an electric powered vehicle, comprising:

providing electric powered vehicles, each electric powered vehicle comprising:

a chassis defining a battery module compartment,  
and

a battery module insertable into the battery module compartment of the chassis, whereby the battery module completes the chassis upon insertion in the battery module compartment thereby providing the chassis with required structural integrity necessary to support the electric powered vehicle during travel;

providing a service facility with a plurality of battery modules and a system for charging the battery modules;

opening the service facility to drivers owning the electric powered vehicles, whereby a driver having an electric powered vehicle with a depleted battery module enters the service facility;

removing the depleted battery from the electric powered vehicle, thereby removing a portion of the chassis for the electric powered vehicle;

inserting a fully charged battery module into the electric powered vehicle, thereby completing the chassis of the electric powered vehicle and providing the chassis with required structural integrity necessary to support the electric powered vehicle during travel; and charging the driver for the fully charged battery module.

#### **THE REFERENCES**

The references relied upon by the examiner is:

Weaver	3,760,770	Sept. 25, 1973
Chase, Jr. (Chase)	5,760,569	Jun. 2, 1998

#### **THE REJECTION AT ISSUE**

Claims 25 through 27 and 29 stand rejected under 35 U.S.C. § 103 as being unpatentable over Weaver in view of Chase. The examiner's rejection is set forth on pages 3 and 4 of the answer. Throughout the opinion we make reference to the brief and the answer for the respective details thereof.

#### **OPINION**

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

With full consideration being given to the subject matter on appeal, the examiner's rejection and the arguments of appellant and the examiner, for the reasons stated *infra* we will not sustain the examiner's rejection of claims 25 through 27 and 29 under 35 U.S.C. § 103.

Appellant asserts that independent claim 27 recites a step of providing an electric powered vehicle with a chassis and wherein the battery module completes the chassis when the battery module is inserted into the chassis thereby providing the required structural integrity to support the vehicle during travel. See Brief p. 4. Appellant argues that Weaver teaches a battery powered feed cart with a battery drawer. The battery drawer is located within the undercarriage but in no way discloses or suggests that the battery drawer "is necessary to complete the undercarriage 22 and thus provide the undercarriage with required structural integrity." Instead, appellant asserts that Weaver teaches the under carriage is fully formed and capable of supporting the feed box. See brief p. 6. Appellant further argues:

Weaver in column 9, lines 37-43, states that the battery drawer 164 is centrally located within the undercarriage 22 in order to provide the feed cart 20 with a favorable center of gravity. Appellant respectfully contends that "center of gravity" in no way discloses the completion of a chassis with required structural integrity necessary to support an electric powered vehicle during travel. "Center of gravity" relates to preventing the feed cart 20 from tipping

over, whereas the completion of the chassis relates to reinforcing the chassis such that the chassis has the structural integrity necessary to withstand normal driving conditions.

In response, the examiner states on page 5 of the answer:

Weaver et al. teaches [sic, teach] "the battery drawer/module (164) and the batteries contained therein give the feed cart 20 a very favorable center of gravity which allows the feed cart to be freely maneuvered around the livestock feeding area without significant danger of tipping over", in column 9, lines 37-43. A cart chassis that is prone to tipping over does not have "the structural integrity necessary to withstand normal driving conditions." In order for the cart of Weaver to have "the structural integrity necessary to withstand normal driving conditions" the battery drawer/module must be in place to prevent the cart from tipping over.

Initially we note that there is no disagreement concerning Weaver's teaching that centrally locating the battery in the feed cart is to provide a favorable center of gravity, rather the disagreement is as to whether this teaching meets the limitations of claim 27. We disagree with the examiner's claim interpretation and determination that having a favorable center of gravity provides the claimed structural integrity. Independent claim 27, recites "whereby the battery module completes the chassis upon insertion in the battery module compartment thereby providing the chassis the required structural integrity necessary to support the electric powered vehicle during travel." Implicit in this limitation is that the chassis is not complete until the

battery module is inserted into the chassis. We consider the scope of this limitation to require the battery module, which upon being inserted into the chassis of the electric vehicle, to provide the chassis with the structure necessary to support the vehicle during travel, i.e. the battery module and the chassis provide the structure which supports the vehicle. The examiner has not shown that the chassis of Weaver's feed cart is requires the battery module to support the feed cart during vehicle travel. The center or gravity of the feed cart relates to the distribution of mass of the feed cart, preventing the vehicle from tipping relates to the dynamics of the vehicle during travel. We do not find that these concepts relate to whether the structure of the feed cart can support the feed cart during vehicle travel. The examiner has not asserted nor do we find that Chase teaches or suggests modifying Weaver to include such a feature. Accordingly, we will not sustain



Appeal No. 2006-1280  
Application No. 10/645,025

Law Offices of Christopher L. Makay  
1634 Milam Building  
115 East Travis Street  
San Antonio, TX 78205-1763

REN/ki